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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,597	12/13/2005	Masaru Kuribayashi	Q91453	6956
23373 7590 03/21/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER GLASS, ERICK DAVID	
			ART UNIT	PAPER NUMBER
			2837	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	03/21/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/560,597

Applicant(s)

KURIBAYASHI ET AL.

Examiner

Erick Glass

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/13/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kajiura (US 6,713,888).

With respect to claim 1, Kajiura teaches a rotating electrical machine which includes a rotor having a field winding, and a stator disposed at an outer periphery of the rotor and having a stator winding, and performs electric power generation and starting; and an inverter unit which converts DC power of a battery into AC power at a time of a starting motor operation of the rotating electrical machine (column 3, lines 20-42) and supplies it to the stator winding, and converts AC power generated in the stator winding into DC power at a time of a generator operation of the rotating electrical machine and charges the battery (column 8, line 64), wherein the inverter unit (fig. 1, 200) is integrally mounted to the rotating electrical machine (fig. 1, 100) and is electrically connected to the stator winding (fig. 1, 121), the rotor includes a rotor iron core which includes a magnetic part where adjacent magnetic poles are formed to have different polarities, and a field winding, and a permanent magnet which is disposed between the adjacent magnetic poles and supplies, together with the field winding, magnetic flux to the stator iron core (column 5, lines 57-65), and the magnetic flux by the permanent magnet is adjusted so that in an actual use rotation speed range of the rotating electrical machine, a deenergization no-load induced voltage or a

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deenergization induced voltage in a minimum electric load power generation state does not exceed a voltage of the battery (column 2, lines 54-56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Kajiura in view of Takahashi (PGPUB 2003/0234578).

With respect to claims 2-5, Kajiura does not teach the specific motor structure of the invention.

With respect to claim 2, Takahashi et al teaches characterized in that the rotor is a claw-pole type rotor (paragraph 0084), and the permanent magnet includes a pair of permanent magnets interposed between pawl-shaped magnetic pole parts of the rotor (fig. 4A-C, 21A and 21B). It would have been obvious to one having ordinary skill in the art at the time of the invention to go into further detail about motor/generator structure detail as taught by Takahashi. It is commonly known in the art at the time of the invention for a claw-pole type rotor to have pawl-shaped pole parts.

With respect to claim 3, Takahashi et al teaches characterized in that the inverter unit (fig. 1, 200) is integrally mounted on an end face of the rotating electrical machine in an axial direction. It is commonly known in the art at the time of the invention, for an inverter to be mounted on various parts of a motor assembly.

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With respect to claim 4, Takahashi et al teaches characterized in that the inverter (fig. 1, 200) unit is integrally mounted on a surface of the rotating electrical machine in a radial direction. It is commonly known in the art at the time of the invention, for an inverter to be mounted on various parts of a motor assembly.

With respect to claim 5, Takahashi et al teaches characterized in that the rotating electrical machine includes a cooling fan (fig. 9, 37), and cooling is made by cooling air thereof in order of the inverter unit, the rotor, and the stator.

With respect to claim 6, Kajiura teaches characterized in that the stator winding includes a rectangular wire (fig. 1, 121) or a stator coil arrayed or shaped into a rectangular shape. It is commonly known in the art at the time of the invention for wires to have different cross sectional shapes.

With respect to claim 7, Kajiura teaches characterized in that a sectional shape of a coil turn part of the stator winding is round (fig. 1, 121). It is commonly known in the art at the time of the invention for wires to have different cross sectional shapes.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Glass whose telephone number is 571-272-8395. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EG


LINCOLN D. NOVAN
SUPERVISORY PATENT EXAMINER